Letters

COMMENT & RESPONSE

In Reply We thank Briggs and colleagues for their thoughtful letter in response to our communication on sudden sensorineural hearing loss (SSNHL) and COVID-19 vaccination.1 We fully share many of the questions and concerns that were raised, which include the veracity of preveriﬁcation incident reports from the Vaccine Adverse Events Reporting System (VAERS), the inability to conﬁrm SSNHL based on the American Academy of Otolaryngology–Head and Neck Surgery diagnostic criteria, the duration chosen between COVID-19 vaccination and SSNHL for inclusion in the incidence estimate, and the inability to differentiate between conductive vs SSNHL in each report (eg, when hypoaacusis was reported as the diagnosis). Unfortunately, space constraints in our initial article precluded a full discussion of these limitations and the methodology used to mitigate them.

A key component of our approach was to apply a sensitivity analysis to the estimate of SSNHL incidence derived from VAERS reports. In the maximum incidence estimate, we not only assumed all submitted incident reports represented true SSNHL, which is almost certainly not true, but also imposed an additional 100% underreporting bias on these reports based on the demonstration of this type of bias with a previous vaccine safety study using VAERS data.2 Contextualizing the maximum incidence estimate within expected population norms of idiopathic SSNHL provided a valuable national snapshot of this important issue. To fully address these and other issues, we have since performed a more comprehensive and up-to-date analysis of VAERS incidence reports that examined SSNHL cases across all 3 COVID-19 vaccine manufacturers currently used in the US and provides a more detailed account of the methodology.

We wholly agree that epidemiologic studies are needed to rigorously address this question, as has been done for other vaccines.3,4 However, during a time when anecdotal reports of SSNHL occurring after COVID-19 vaccination were rapidly emerging from otolaryngology practices just as a national vaccination campaign was also rapidly expanding, we felt obligated to both address a relevant clinical question for otolaryngologists and to convey 2 important public health messages: (1) it is critical for clinicians to report all suspected adverse events to VAERS; and (2) reassuringly, at the time of preliminary analysis, there was not a broad population signal that suggested an association between COVID-19 vaccination and SSNHL. By drawing on data of a national scale, we hoped to aid otolaryngologists faced with the difficult challenge of counseling patients who sustained SSNHL in temporal correlation with COVID-19 vaccination, while adhering to public health guidelines, particularly when considering a second dose.

In addition, manipulation or misinterpretation of findings from vaccine safety-related studies by fringe elements may result in artificial inﬂation of perceived risk of vaccine-associated adverse events,5 which is of particular concern in the age of increasing reliance on social media platforms for daily news.6 This point further highlights the need for rigor and scrutiny in future studies. Finally, we fully endorse the public health recommendations emphasized by Briggs et al, which align with ours, and unreservedly advocate for their adoption.

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